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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 AUG 10 Time limit for inactive STN sessions doubles to 40 minutes
NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS 4 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS 5 AUG 24 CA/Caplus enhanced with legal status information for U.S. patents
NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS 7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS 8 OCT 21 Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS 9 OCT 21 Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS 10 NOV 23 Addition of SCAN format to selected STN databases
NEWS 11 NOV 23 Annual Reload of IFI Databases
NEWS 12 DEC 01 FRFULL Content and Search Enhancements
NEWS 13 DEC 01 DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS 14 DEC 02 Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS 15 DEC 02 PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS 16 DEC 02 USGENE: Enhanced coverage of bibliographic and sequence information
NEWS 17 DEC 21 New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/Caplus
NEWS 18 JAN 12 Match STN Content and Features to Your Information Needs, Quickly and Conveniently
NEWS 19 JAN 25 Annual Reload of MEDLINE database
NEWS 20 FEB 16 STN Express Maintenance Release, Version 8.4.2, Is Now Available for Download
NEWS 21 FEB 16 Derwent World Patents Index (DWPI) Revises Indexing of Author Abstracts
NEWS 22 FEB 16 New FASTA Display Formats Added to USGENE and PCTGEN
NEWS 23 FEB 16 INPADOCDB and INPAFAMDB Enriched with New Content and Features
NEWS 24 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail Addresses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 12:41:35 ON 16 MAR 2010

=> file registry		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 12:42:15 ON 16 MAR 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 MAR 2010 HIGHEST RN 1210111-73-1
DICTIONARY FILE UPDATES: 15 MAR 2010 HIGHEST RN 1210111-73-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

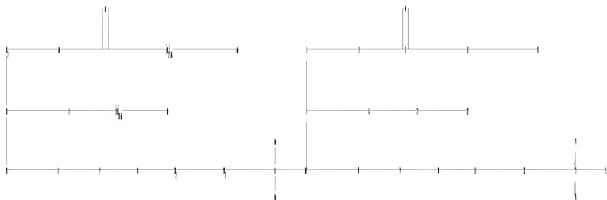
TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdnoc/properties.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10781894_NEW_20100316.str



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chain nodes :
1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 21 22
chain bonds :
1-2 1-5 2-3 3-4 3-17 5-6 5-7 6-21 7-8 8-9 9-10 10-11 11-12 12-13
13-14 13-15 13-16 17-18 21-22
exact/norm bonds :
2-3 3-4 5-6 7-8 8-9 9-10
exact bonds :
1-2 1-5 3-17 5-7 6-21 10-11 11-12 12-13 13-14 13-15 13-16 17-18 21-22

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Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS
18:CLASS 21:CLASS 22:CLASS

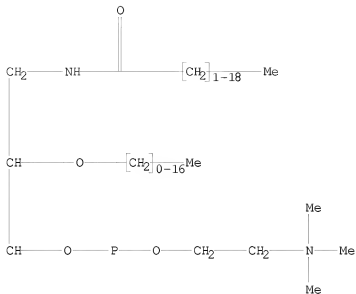
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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss

SAMPLE SEARCH INITIATED 12:42:33 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS

4 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 8 TO 329

PROJECTED ANSWERS: 4 TO 200

L2 4 SEA SSS SAM L1

=> d l2 1-4

L2 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2010 ACS on STN

RN 210418-12-5 REGISTRY

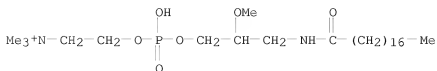
ED Entered STN: 26 Aug 1998

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
 4-hydroxy-7-methoxy-N,N,N-trimethyl-10-oxo-, chloride, 4-oxide (9CI) (CA
 INDEX NAME)

MF C27 H58 N2 O6 P . Cl

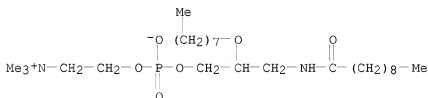
SR CAS Client Services

CRN (742681-49-8)



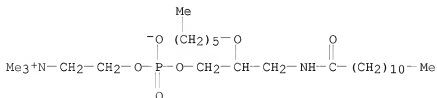
● Cl⁻

L2 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 207298-97-3 REGISTRY
 ED Entered STN: 17 Jun 1998
 CN 3,5-Dioxa-9-aza-4-phosphanadecan-1-aminium,
 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)
 MF C26 H55 N2 O6 P
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER



2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 207298-94-0 REGISTRY
 ED Entered STN: 17 Jun 1998
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-(hexyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)
 MF C26 H55 N2 O6 P
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER



2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 207298-93-9 REGISTRY
 ED Entered STN: 17 Jun 1998

FILE LAST UPDATED: 15 Mar 2010 (20100315/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAPLUS now includes complete International Patent Classification (IPC)
reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l3

L4 23 L3

=> dup rem l4

PROCESSING COMPLETED FOR L4

L5 23 DUP REM L4 (0 DUPLICATES REMOVED)

=> s l5 and (virus or viral)

L6 23 S L5

434512 VIRUS

91338 VIRUSES

451209 VIRUS

(VIRUS OR VIRUSES)

218316 VIRAL

29 VIRALS

218333 VIRAL

(VIRAL OR VIRALS)

L7 10 L6 AND (VIRUS OR VIRAL)

=> d l7 1-10 ibib abs hitstr

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:198407 CAPLUS

DOCUMENT NUMBER: 144:403777

TITLE: Using small molecules to overcome drug resistance
induced by a viral oncogene

AUTHOR(S): Smukste, Inese; Bhalala, Oneil; Persico, Marco;
Stockwell, Brent R.

CORPORATE SOURCE: Department of Biological Sciences and Department of
Chemistry, Fairchild Center, Columbia University, New
York, NY, 10027, USA

SOURCE: Cancer Cell (2006), 9(2), 133-146
CODEN: CCAECI; ISSN: 1535-6108

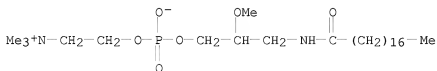
PUBLISHER: Cell Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We used small mol. screening to discover compds. and mechanisms for
overcoming E6 oncogene-mediated drug resistance. Using high-throughput
screening in isogenic cell lines, we identified compds. that potentiate
doxorubicin's lethality in E6-expressing colon cancer cells. Such compds.
included quaternary ammonium salts, protein synthesis inhibitors,
11-deoxyprostaglandins, and two addnl. classes of compds.-analogs of
1,3-bis(4-morpholinylmethyl)-2-imidazolidinethione (a thiourea) and
acylated secondary amines that we named indoxins. Indoxins upregulated
topoisomerase II α , the target of doxorubicin, thereby increasing
doxorubicin lethality. We developed a photolabeling strategy to identify
targets of indoxin and discovered a nuclear actin-related protein complex
as a candidate indoxin target.

IT 88876-07-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (small mols. which overcome drug resistance induced by a viral
 oncogene)
 RN 88876-07-7 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
 4-hydroxy-7-methoxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA
 INDEX NAME)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD
 (8 CITINGS)
 REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

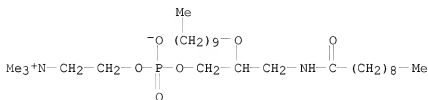
L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2010 ACS ON STN
 ACCESSION NUMBER: 2005:904330 CAPLUS
 DOCUMENT NUMBER: 143:222464
 TITLE: Phospholipids for the treatment of infection by
 togaviruses, herpes viruses and
 coronaviruses
 INVENTOR(S): Fleming, Ronald A.; Hes, Jan V.; Huang, Yunsheng;
 Read, Russ H.; Morris-Natschke, Susan L.; Ishaq,
 Khalid S.; Kucera, Louis S.; Furman, Phillip A.
 PATENT ASSIGNEE(S): Kucera Pharmaceutical Company, USA
 SOURCE: U.S. Pat. Appl. Publ., 36 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050187192	A1	20050825	US 2004-783927	20040220
PRIORITY APPLN. INFO.:			US 2004-783927	20040220
OTHER SOURCE(S):	MARPAT 143:222464			

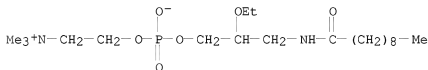
AB Provided are compds., methods and pharmaceutical compns. for treating a
 host, especially a human, infected with a togavirus, herpes virus
 and/or coronavirus, and in particular SARS-CoV, cytomegalovirus or
 varicella-zoster virus. The method in one embodiment comprises
 administering to that host an effective amount of an anti-togavirus,
 anti-herpes virus and/or anti-coronavirus phospholipid or a
 pharmaceutically acceptable salt or prodrug thereof. The phospholipid
 compound is, e.g., a 3-alkylamido-2-alkoxypropylphosphocholine compound or
 salt thereof. The compound may be administered alone or in combination
 and/or alternation with one or more other antiviral agents. The EC50 of
 an alkylamido-2-alkoxypropylphosphocholine against varicella zoster
 virus was 0.48 µg/mL.

IT 252371-27-0 443882-90-4 443882-91-5
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (phospholipids for treatment of infection by togaviruses, herpes
 viruses and coronaviruses)

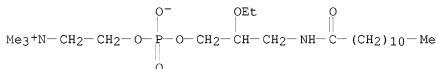
RN 252371-27-0 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium,
 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)



RN 443882-90-4 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA
 INDEX NAME)



RN 443882-91-5 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA
 INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)

L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2010 ACS ON STN
 ACCESSION NUMBER: 2005:902611 CAPLUS
 DOCUMENT NUMBER: 143:241938
 TITLE: Methods and compositions for the treatment of
 respiratory syncytial virus
 INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.; Ishaq,
 Khalid S.; Fleming, Ronald A.; Hess, Jan V.; Huang,
 Yunsheng; Read, Russ H.; Furman, Phillip A.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 29 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20050187191 A1 20050825 US 2004-781894 20040220
 WO 2005099719 A2 20051027 WO 2005-US3972 20050209
 WO 2005099719 A3 20070322

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
 SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-781894 A 20040220

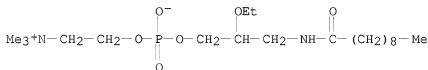
OTHER SOURCE(S): MARPAT 143:241938

AB The invention includes compds. useful for inhibiting RSV replication and treating a host infected with RSV. The invention also includes methods of treating a host infected with RSV by administering to the host an anti-RSV effective amount of a compound of the invention.

IT 443882-90-4, KPC 11 443882-91-5, KPC 15
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (comps. for treatment of respiratory syncytial virus)

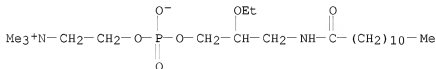
RN 443882-90-4 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

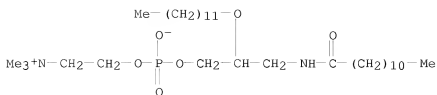


IT 207298-91-7 207298-93-9 252371-27-0
 443882-96-0

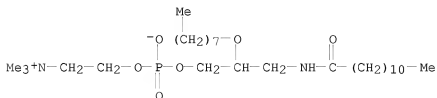
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (comps. for treatment of respiratory syncytial virus)

RN 207298-91-7 CAPLUS

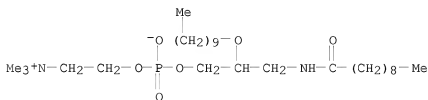
CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



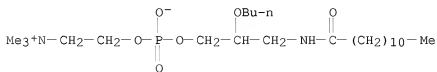
RN 207298-93-9 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)



RN 252371-27-0 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium,
 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)



RN 443882-96-0 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-butoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA
 INDEX NAME)



L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1998:435743 CAPLUS
 DOCUMENT NUMBER: 129:90448
 ORIGINAL REFERENCE NO.: 129:18491a,18494a
 TITLE: Method of treating hepatitis virus
 infections
 INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.
 PATENT ASSIGNEE(S): Wake Forest University, USA; University of North

SOURCE: Carolina
U.S., 17 pp., Cont.-in-part of U. S. Ser. No. 74,943,
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5770584	A	19980623	US 1995-465947	19950606
US 6030960	A	20000229	US 1998-102308	19980622
PRIORITY APPLN. INFO.:			US 1993-74943	B2 19930610
			US 1995-465947	A3 19950606

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

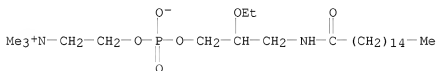
OTHER SOURCE(S): MARPAT 129:90448

AB A method of treating hepatitis virus infection is disclosed.
The method involves administering to a human subject in need of such
treatment an effective hepatitis virus-combating amount of an
alkyl lipid or alkyl lipid derivative

IT 112989-01-2P 112989-02-3P 209532-02-5P
209532-03-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
(alkyl lipids for treating hepatitis virus infections)

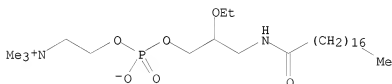
RN 112989-01-2 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium,
7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX
NAME)



RN 112989-02-3 CAPLUS

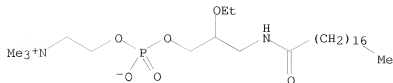
CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX
NAME)



RN 209532-02-5 CAPLUS

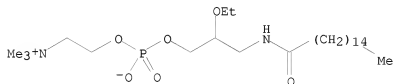
CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (+)-
(9CI) (CA INDEX NAME)

Rotation (+).



RN 209532-03-6 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (+)-
 (9CI) (CA INDEX NAME)

Rotation (+).



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (4 CITINGS)
 REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2010 ACS ON STN

ACCESSION NUMBER: 1998:205430 CAPLUS

DOCUMENT NUMBER: 128:316940

ORIGINAL REFERENCE NO.: 128:62637a,62640a

TITLE: In vitro evaluation and characterization of newly
 designed alkylamidophospholipid analogs as anti-human
 immunodeficiency virus type 1 agents

AUTHOR(S): Kucera, L. S.; Iyer, N.; Morris-Natschke, S. L.; Chen,
 S. Y.; Gumus, F.; Ishaq, K.; Herrmann, D. B. J.
 CORPORATE SOURCE: Wake Forest University School Medicine, Winston-Salem,
 NC, USA

SOURCE: Antiviral Chemistry & Chemotherapy (1998), 9(2),
 157-165

CODEN: ACCHEH; ISSN: 0956-3202

PUBLISHER: International Medical Press

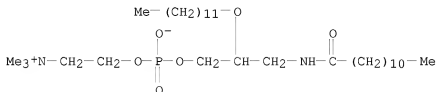
DOCUMENT TYPE: Journal

LANGUAGE: English

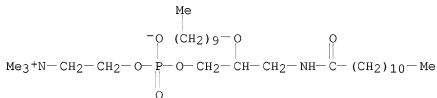
AB Our labs. first reported two novel classes of complex synthetic lipids,
 including alkylamidophosphocholines (PC lipid; CP-51) and
 alkylamidophosphate ester-linked lipid-AZT conjugates (lipid-AZT
 conjugates; CP-92), with selective and potent activity against human
 immunodeficiency virus type 1 (HIV-1). To extend these
 observations, we synthesized addnl. PC lipids and lipid-AZT conjugates
 (INK and INK-AZT conjugate) to evaluate their structure-activity
 relationships by testing for selectivity against infectious wild-type (wt)
 and drug-resistant HIV-1 replication, virus fusogenic activity
 and toxicity replication, virus fusogenic activity and toxicity
 for mouse bone marrow cells. PC lipid compds. with medium chain lengths
 at positions 1 and 2 gave an improved selective index (SI). INK-3, with
 12 and 8 carbons and INK-15, with 10 and 12 carbons were among the most
 selective when evaluated in CEM-SS cells. INK-14, a lipid-AZT conjugate
 where AZT replaced the choline in PC lipid INK-3, gave the highest SI of
 >1250 against both infectious wt HIV-1 replication in CEM-SS cells and a

clin. isolate in peripheral blood leukocytes. Notably, the PC lipid compds. INK-3 and INK-15, but not the lipid-AZT conjugate INK-14, were potent inhibitors of matched pairs of AZT-sensitive and AZT-resistant HIV-1 clin. isolates. INK-3 also inhibited replication of HIV-2 and TIBO-resistant HIV-1, and inhibited HIV-1-mediated fusogenic activity by 78, 41 and 9% in a dose-dependent manner. The TC50 for mouse bone marrow cells was >100 µg/mL for CP-51 and 0.142-0.259 µg/mL for AZT. These data suggest that optimum PC lipid compds. are significantly less toxic than AZT and have high potential as novel therapeutic agents for AIDS.

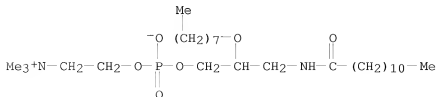
IT 207298-91-7P 207298-92-8P 207298-93-9P
 207298-94-0P 207298-95-1P 207298-97-3P
 207298-99-5P
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (anti-HIV-1 activity and preparation of alkylamidophospholipid analogs)
 RN 207298-91-7 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide
 (9CI) (CA INDEX NAME)



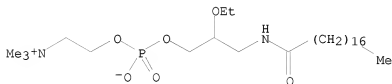
RN 207298-92-8 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)



RN 207298-93-9 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium,
 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI)
 (CA INDEX NAME)



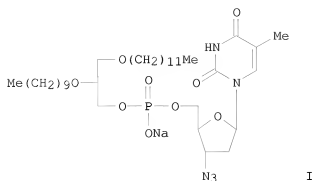
effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anti-HIV-1 activity and preparation of alkylamidophospholipid analogs)
 RN 112989-02-3 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
 REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

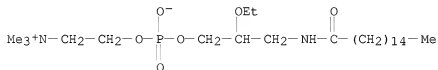
L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1995:701769 CAPLUS
 DOCUMENT NUMBER: 123:112632
 ORIGINAL REFERENCE NO.: 123:20141a,20144a
 TITLE: Phospholipids for combating hepatitis B virus infection
 INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.
 PATENT ASSIGNEE(S): Wake Forest University, USA; University of North Carolina
 SOURCE: PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9428908	A2	19941222	WO 1994-US5855	19940525
WO 9428908	A3	19950323		
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2164717	A1	19941222	CA 1994-2164717	19940525
CA 2164717	C	20091020		
AU 9470448	A	19950103	AU 1994-70448	19940525
EP 702556	A1	19960327	EP 1994-919231	19940525
EP 702556	B1	20021023		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 226437	T	20021115	AT 1994-919231	19940525
PRIORITY APPLN. INFO.:			US 1993-74943	A 19930610
			WO 1994-US5855	W 19940525
OTHER SOURCE(S):		MARPAT 123:112632		
GI				

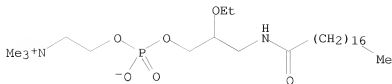


AB A method of treating infection with hepatitis B virus is disclosed. The method comprises administration of alkyl ether phospholipids and derivs. of formula DCH₂XCH₂YR₁ [Y = S, O, NH, NMe, NHCO, NMeCO; R₁ = (un)branched (un)saturated C₁₀-20 alk(en/yn)yl; X = bond, CH₂ (un)substituted by OH, alkyl, alkoxy, or alkylthio; D = (PO₄)-E, N+R₅R₆FW Z-; E = (mono/di/trialkyl)ammonioalkyl or a nucleic acid base conjugate; F = alkylene; R₅, R₆ = H, alkyl; W = OH, SH; Z- = anion]. Several compds. were prepared. For example, etherification of isopropylidenglycerol with 1-bromododecane using KOH in PhMe and acid hydrolysis with HCl in MeOH-Et₂O mixture gave 71% 3-dodecyloxy-1,2-propanediol. This underwent 1-O-tritylation with Ph₃CCl in pyridine, 2-O-alkylation by 1-bromodecane and NaH in THF (51%), and detritylation by p-MeC₆H₄SO₃H in CHCl₃-MeOH (63%) to give 3-dodecyloxy-2-decyloxy-1-propanol. The latter underwent esterification with (PhO)₂P(O)Cl (60%), hydrogenolysis of the Ph ester to the phosphatidic acid, and reesterification with AZT using DCC (22%) to give title compound (Na salt) I. Another compound, (±)-3-octadecanamido-2-ethoxypropyl-1-phosphocholine, inhibited HBV virion DNA and intracellular RI HBV DNA in expts. to a comparable or greater extent than the standard agent ddC.

IT 112989-01-2P 112989-02-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of phospholipids for combating hepatitis B virus)
 RN 112989-01-2 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX NAME)



RN 112989-02-3 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2010 ACS ON STN

ACCESSION NUMBER: 1995:694404 CAPLUS

DOCUMENT NUMBER: 123:160151

ORIGINAL REFERENCE NO.: 123:28207a,28210a

TITLE: Membrane-interactive phospholipids inhibit HIV type 1-induced cell fusion and surface gp160/ gp120 binding to monoclonal antibody

AUTHOR(S): Krugner-Higby, Lisa; Goff, David; Edwards, Terri; Iyer, Nathan; Neufeld, Jay; Kute, Timothy; Morris-Natschke, Susan; Ishaq, Khalid; Piantadosi, Claude; Kucera, Louis S.

CORPORATE SOURCE: Wake Forest University, Winsto-Salem, NC, 27157-1064, USA

SOURCE: AIDS Research and Human Retroviruses (1995), 11(6), 705-12

CODEN: ARHRE7; ISSN: 0889-2229

PUBLISHER: Liebert

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Membrane-interactive phospholipids (PLs), previously evaluated for activity against HIV-1 in vitro, are known to affect late steps in viral replication. Studies were done to determine the effects of PL analogs on post-translational processing of HIV-1 proteins, binding of viral surface gp160/gp120 to CD4 receptor, and HIV-1-induced cell fusion. Results of this investigation indicated that PL alone (1-octadecanamido-2-ethoxypropyl-rac-3-phosphocholine, CP-51) and PL-A2T conjugate (1-octadecanamido-2-ethoxypropyl-rac-3-phospho-3'-azido-3'-deoxythymidine, CP-92) have no effect on HIV-1-induced syntheses or processing of gp160/gp120, pr51, p24, or p17 (including myristoylation) in infected cells. Progeny HIV-1 particles made in CP-92-treated H9IIIB cells contained gp120, pr51, and p24; however, these virus particles had reduced capacity to bind to CD4+ cells. Both CP-51 and CP-92 inhibited syncytium (cell fusion) formation between treated HIV-1-infected cells and uninfected CD4+ cells, and they reduced HIV-1 gp160/gp120 binding to CD4+ cells and monoclonal antibody. These results suggest that anti-HIV-1 activity of PL compds. involves alteration of cell surface membranes and viral envelopes. Phospholipid compds. are a novel class of membrane interactive compds. with potential use in blocking the spread of HIV-1 infection and pathogenesis in AIDS.

IT 112989-02-3, CP 51

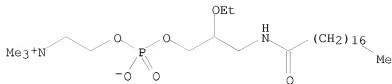
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(membrane-interactive phospholipids inhibit HIV type 1-induced cell fusion and surface gp160/ gp120 binding to monoclonal antibody)

RN 112989-02-3 CAPLUS

CN 3,5-Dioxo-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX

NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:185901 CAPLUS

DOCUMENT NUMBER: 114:185901

ORIGINAL REFERENCE NO.: 114:31415a,31418a

TITLE: Synthesis and evaluation of novel ether lipid nucleoside conjugates for anti-HIV-1 activity
AUTHOR(S): Piantadosi, Claude; Marasco, Canio J., Jr.; Morris-Natschke, Susan L.; Meyer, Karen L.; Gumus, Fatma; Surles, Jefferson R.; Ishaq, Khalid S.; Kucera, Louis S.; Iyer, Nathan; et al.

CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA

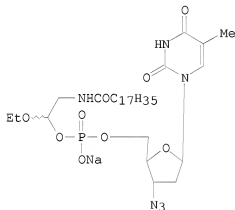
SOURCE: Journal of Medicinal Chemistry (1991), 34(4), 1408-14
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:185901

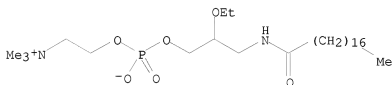
GI



I

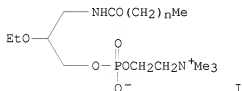
AB Combinations of an amidoalkylphosphocholine, C17H35CONHCH2CH(OEt)CH2OP(O)(O-)OCH2CH2N+Me3, and AZT were found to cause an apparent synergistic action in suppressing infectious HIV-1 replication. In addition, alkylamido, alkyloxy, and alkylthio ether lipids were chemical linked to anti-HIV-1 nucleosides (AZT and DDI) through phosphate and phosphonate linkages. These conjugates show promising in vitro anti-HIV-1 activity. Also, the conjugates have a 5-10-fold reduction in cell cytotoxicity compared to AZT alone. The most active compound, an alkylamido ether lipid-AZT conjugate, I was found to have a differential selectivity of 1793 in a syncytial plaque assay. In comparison, AZT alone

has a value of 1281.
 IT 112989-02-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (anti-HIV-1 activity of)
 RN 112989-02-3 CAPLUS
 CN 3,5-Dioxo-9-aza-4-phosphaheptacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX
 NAME)



OS.CITING REF COUNT: 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS
 RECORD (37 CITINGS)

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1991:185881 CAPLUS
 DOCUMENT NUMBER: 114:185881
 ORIGINAL REFERENCE NO.: 114:31411a,31414a
 TITLE: In vitro evaluation of phosphocholine and quaternary
 ammonium containing lipids as novel anti-HIV agents
 AUTHOR(S): Meyer, Karen L.; Marasco, Canino J., Jr.;
 Morris-Natschke, Susan L.; Ishaq, Khalid S.;
 Piantadosi, Claude; Kucera, Louis S.
 CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC,
 27599, USA
 SOURCE: Journal of Medicinal Chemistry (1991), 34(4), 1377-83
 CODEN: JMCMAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 114:185881
 GI



AB A series of synthetic lipids containing a two- or three-carbon backbone substituted with a thio, oxy, or amidoalkyl functionality and either a phosphocholine or quaternary ammonium moiety were evaluated as potential anti-HIV-1 agents. Several analogs were identified as possessing activity with the most promising compound being rac-3-octadecanamido-2-ethoxypropylphosphocholine (I). I exhibited an IC50 for the inhibition of plaque formation of 0.16 μ M which was 84-fold lower than the IC50 value determined for CEM-SS cell growth inhibition. Initial mechanistic studies have indicated that these compds., unlike AZT, are not reverse transcriptase (RT) inhibitors, but instead appear to inhibit a late step in HIV replication involving virus assembly and infectious virus production. Since these lipids are acting via a different, mechanism they represent an alternative approach to the

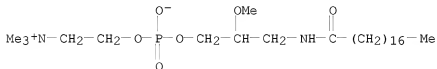
chemotherapeutic treatment of AIDS as well as candidates for combination therapy with AZT.

IT 88876-07-7 112989-00-1 112989-01-2
112989-02-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(anti-HIV-1 activity of)

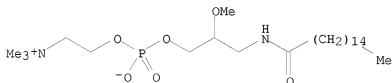
RN 88876-07-7 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
4-hydroxy-7-methoxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA
INDEX NAME)



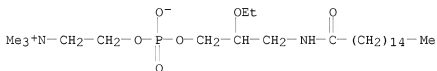
RN 112989-00-1 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium,
4-hydroxy-7-methoxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI)
(CA INDEX NAME)



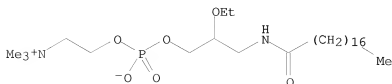
RN 112989-01-2 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium,
7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX
NAME)



RN 112989-02-3 CAPLUS

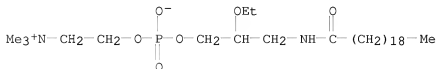
CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX
NAME)



IT 149576-20-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and anti-HIV-1 activity of)
 RN 149576-20-5 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphanonacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA
 INDEX NAME)



OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS
 RECORD (17 CITINGS)

L7 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1990:470710 CAPLUS

DOCUMENT NUMBER: 113:70710

ORIGINAL REFERENCE NO.: 113:11741a,11744a

TITLE: Novel membrane-interactive ether lipid analogs that
 inhibit infectious HIV-1 production and induce
 defective virus formation

AUTHOR(S): Kucera, Louis S.; Iyer, Nathan; Leake, Eva; Raben,
 Adam; Modest, Edward J.; Daniel, Larry W.; Piantadosi,
 Claude

CORPORATE SOURCE: Bowman Gray Sch. Med., Wake Forest Univ.,
 Winston-Salem, NC, 27103, USA

SOURCE: AIDS Research and Human Retroviruses (1990), 6(4),
 491-501

CODEN: ARHRE7; ISSN: 0889-2229

DOCUMENT TYPE: Journal

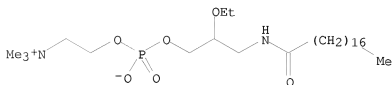
LANGUAGE: English

AB A new class of membrane-active ether lipid (EL) analogs of
 platelet-activating factor were studied for in vitro anti-HIV-1 activity.
 Human T-cell (CEM-ss) monolayers or suspension cultures were used to determine
 effects of structural modifications of Type A phosphorus-containing and Type B
 nonphosphorus EL analogs on (a) the inhibitory concn.50 (IC50) for HIV-1
 syncytial plaque formation and cell growth, and, (b) virus
 budding at the cell plasma membrane. Results indicate that representative
 Type A and Type B EL inhibit HIV-1 but not herpes simplex virus
 type 2 plaque formation when added before or up to 2 days after
 viral infection. Anti-HIV-1 activity does not involve direct
 inactivation of virus infectivity. Type A EL (IC50 range =
 0.2-1.4 µM) with alkoxy, alkylthio, or alkyamido substitution at
 glycerol position 1 and ethoxy or methoxy substitution at position 2, and
 Type B compds. (IC50 range = 0.33-0.63 µM) with an inverse choline or
 nitrogen heterocyclic substitution at position 3 have selective activity
 against HIV-1-infected T-cells. EL treatment of HIV-1-infected cells is
 associated with subsequent release of reverse transcriptase activity, but
 infectious virus production is inhibited with time after infection.
 Electron microscopic examination of HIV-1-infected and EL-treated cells
 revealed absence of detectable budding virus at the plasma
 membrane but presence of intracytoplasmic vacuolar virus
 particles. EL analogs are a novel class of agents that induce defective
 intracytoplasmic vacuolar HIV-1 formation in T-cells. Being membrane
 interactive, EL are ideally suited for combination chemotherapy with
 DNA-interactive anti-HIV nucleoside analogs.

IT 112989-02-3

RL: BIOL (Biological study)
 (human immunodeficiency virus infection response to)

RN 112989-02-3 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium,
 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX
 NAME)



OS.CITING REF COUNT: 31 THERE ARE 31 CAPLUS RECORDS THAT CITE THIS
 RECORD (32 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 12:41:35 ON 16 MAR 2010)

FILE 'REGISTRY' ENTERED AT 12:42:15 ON 16 MAR 2010

L1 STRUCTURE UPLOADED

L2 4 S L1 SSS

L3 47 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:43:06 ON 16 MAR 2010

L4 23 S L3

L5 23 DUP REM L4 (0 DUPLICATES REMOVED)

L6 23 S L5

L7 10 S L5 AND (VIRUS OR VIRAL)

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	64.72	264.88
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-8.50	-8.50

STN INTERNATIONAL LOGOFF AT 12:45:30 ON 16 MAR 2010